

Title (en)  
ROBOT HAVING INDEPENDENT END EFFECTOR LINKAGE MOTION

Title (de)  
ROBOTER MIT UNABHÄNGIGER BEWEGUNG DER GREIFVORRICHTUNG

Title (fr)  
ROBOT COMPRENANT UN LEVIER ARTICULE D'OUTIL TERMINAL INDEPENDANT

Publication  
**EP 1301314 A4 20050406 (EN)**

Application  
**EP 01948739 A 20010626**

Priority  
• US 0120330 W 20010626  
• US 61096900 A 20000706

Abstract (en)  
[origin: US6297611B1] A substrate handling system comprises a robot containing micro-environment in communication with a plurality of processing stations. The robot has a robot arm comprising an end effector linkage mounted to an extensible linkage. Each of the linkages is independently actuatable using an associated motor, with the extensible linkage serving to convey the end effector linkage to the vicinity of a target processing station for delivery or retrieval of a substrate. Motion of the linkages may be synchronized to reduce travel time, and multiple end effectors may be mounted to the extensible linkage for increasing throughput.

IPC 1-7  
**B25J 15/02**; B25J 9/04; B25J 18/02; B25J 9/06

IPC 8 full level  
**B25J 9/04** (2006.01); **B25J 9/06** (2006.01); **B25J 9/10** (2006.01); **B25J 18/02** (2006.01); **B65G 49/07** (2006.01); **H01L 21/677** (2006.01)

CPC (source: EP US)  
**B25J 9/042** (2013.01 - EP US); **B25J 9/107** (2013.01 - EP US); **H01L 21/67742** (2013.01 - EP US)

Citation (search report)  
• [Y] US 5954840 A 19990921 - GENOV GENCO [US], et al  
• [X] US 4488242 A 19841211 - TABATA FUMIO [JP], et al  
• [XY] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 06 22 September 2000 (2000-09-22)  
• See references of WO 0204176A1

Cited by  
CN110520371A

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**US 6297611 B1 20011002**; AT E357316 T1 20070415; DE 60127409 D1 20070503; DE 60127409 T2 20071129; EP 1301314 A1 20030416; EP 1301314 A4 20050406; EP 1301314 B1 20070321; JP 2004502558 A 20040129; WO 0204176 A1 20020117

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